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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,772	12/01/2003	Luis Serra	57450/1141	3809

35743 7590 11/29/2005

KRAMER LEVIN NAFTALIS & FRANKEL LLP
INTELLECTUAL PROPERTY DEPARTMENT
1177 AVENUE OF THE AMERICAS
NEW YORK, NY 10036

EXAMINER

VO, CLIFF N

ART UNIT	PAPER NUMBER
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2676

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/725,772

Applicant(s)

SERRA, LUIS

Examiner

CLIFF N. VO

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☒ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/2/2004</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The IDS paper filed December 2, 2004 has been filed and placed in the record of file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Saito et al (U.S. Patent No. 6,826,297).

As per independent claim 1, Saito et al teach a system and method for displaying three dimensional images comprising a step of subdividing a 3D display region into two or more display sub-regions (Fig.1, 43; col.7, lines 51-57), a step of assigning a set of display rules to each display sub-region (col.7, line 43 through col.8, line 14), and a step of displaying part or all of a 3D data set in each display sub-region according to the rules assigned to that display sub-region (Fig.1, 43; col.11, lines 47-50).

As per dependent claim 2, Saito et al further teach where the 3D data set displayed in each display sub-region is the same but the display rule are different (Fig.1, 43; col.4, lines 3-11; col.11, lines 47-50).

As per dependent claim 3, Saito et al further teach where the 3D data sets displayed in each display sub-region is unique to that display sub-region (Fig.1, 43).

As per dependent claims 4-5, Saito et al further teach the features as now claimed at col.12, lines 20-25.

As per dependent claim 6, Saito et al further teach where the display sub-regions comprise volumes, 2D surface and points (col.6, lines 35-44).

As per dependent claim 7, Saito further teach where the 3D display region is a rectangular crop box (Fig.1, 40; col.6, lines 24-44).

As per dependent claim 8, Saito et al further teach wherein the display region is divided into two display sub-regions whose mutual boundary is a plane (col.4, lines 6-11; col.6, lines 44-55, i.e., one of the 3D object views, i.e., "sub-region", is defined by projecting the parameters on to the bounding XY plane).

As per dependent claim 9, Saito et al further teach where the user can define one or more boundary planes that divide the display region into two or more display sub-regions (col.4, lines 64-67; col.6, lines 56-67).

As per dependent claim 10, Saito et al further teach where the boundary planes are parallel to one or more surfaces of the display region (col.6, lines 37-44, i.e., the boundary planes (XY planes) are perpendicular to the Z axis of the model).

As per dependent claims 11-13, Saito further teach the claimed features at Fig.1, col.12, lines 38-49).

As per dependent claim 14, Saito et al further teach where the variation of the boundaries of display sub-regions include one or more of translation, rotation, scaling,

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shear, linear warping or non-linear warping (col.5, lines 44-49, i.e., translation, *shift switch 114* is used to shift the object's location on the display).

As per dependent claim 15, Saito et al further teach where all the points in the display region associated with a given display sub-region need not to be contiguous (col.7, lines 33-50).

As per claims 16-19, Saito et al further teach the features as now claimed at Figs.1-2.

As per dependent claim 20, Saito et al further teach where the 3D data set displayed in each display sub-region is stored as one of volume raster data (col.8, lines 53-65).

Claims 21-22 are similar to claim 1, Saito et al further teach a computer program product stored in a computer storage device at col.13, lines 1-30.

As per dependent claim 23, Saito et al further teach where one or more 3D data sets are displayed in each display sub-region (Fig.1, 43).

As per dependent claim 24, Saito et al further teach here the same 3D data set is displayed to each display sub-region (col.8, lines 41-52).

Claims 25-27 are similar to claims 1-2, Saito et al further teach a step of loading one or more 3D data set into a 3D display system (col.4, lines 23-51).

As per dependent claim 28, Saito et al further teach where the 3D data sets displayed in each display region are surface renderings of polygonal data set (col.8, line 53 through col.9, line 10).

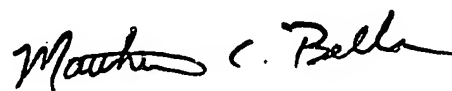
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CLIFF N. VO whose telephone number is 571-272-7651. The examiner can normally be reached on 2nd Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MATTHEW BELLA can be reached on 571-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CLIFF N VO
Examiner
Art Unit 2676



MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600